

**A New Species of *Typhlacontias*
(Reptilia: Scincidae: Feylininae)
from Western Tanzania**

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A new species of *Typhlacontias* is described from the Katavi National Park in western Tanzania, extending the range of the genus 800 km to the northeast from the nearest locality for *T. gracilis* in western Zambia. It differs from the latter species in two head shield fusions.

The genus *Typhlacontias* Bocage was revised by Haacke (1997). He recognised six species, four from the northern Namib Desert and two, *T. gracilis* and *T. rohani*, from the Kalahari sand regions of southeastern Angola, northwestern Namibia, northern Botswana, western Zimbabwe (the latter recently recorded from south of Bulawayo [Broadley and Wilson 2005]) and southwestern Zambia (Fig. 1). It was therefore quite unexpected when a population belonging to the latter complex was found in the Katavi National Park in western Tanzania, 800 km northeast of Kabompo, the nearest locality for *T. gracilis*, which it closely resembles. This taxon is described below.

A recent study of the phylogeny of the Scincidae of sub-Saharan Africa, based on molecular data, indicates that the genus *Typhlacontias* is sister to a clade including *Feylinia* and *Melanoseps*, so these genera are now assigned to the subfamily Feylininae (Whiting et al. 2003).

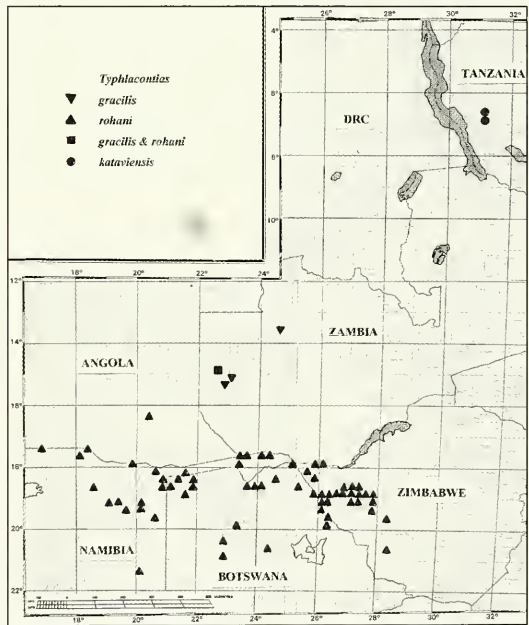


FIGURE 1. Distribution of the *Typhlacontias gracilis* complex in central Africa.

MATERIAL AND METHODS

Meristic data from Haacke (1997) were augmented by additional data from Zambian material of *T. gracilis* in the Natural History Museum of Zimbabwe (NMZB) and the arrangement of head shields in the new taxon was compared with them.

Scale counts (ventrals and subcaudals) were made using a Watson M8 binocular microscope. Head shield terminology follows Haacke (1997). Snout-vent and tail measurements were made using a white-face tape, but are not precise, as the very fragile tail in these animals makes this operation difficult.

SYSTEMATICS

Typhlacontias kataviensis Broadley, sp. nov.

Figures 2–3.

HOLOTYPE.— California Academy of Sciences (CAS) 227747 (field number 03660). An adult from Mswala Sands, bordering the Katavi floodplain [06°38'33"S 31°12'32"E] at ca. 850 m in the Katavi National Park, western Tanzania. Collected by T.A. Gardner on 6 March 2003.

PARATYPES.— CAS 227745–227746, 227748 with the same data as the holotype. CAS 227740 from Katisunga Mbuga [06°52'43"S 31°11'04"E, 13 April 2003] and CAS 227749, 14 April 2003 and 231982 (no date) from Jaribu Mtgao [06°54'03"S 31°12'21"E], both these localities being on sand ridges bordering the Katisunga floodplain, Katavi National Park. Collected by pitfall trapping and superficial manual digging.

ETYMOLOGY.— This species is named for the Katavi National Park, to which it may prove to be endemic.

DIAGNOSIS.— Close to *T. gracilis*, but usually distinguished by the fusion of the 'third supraocular' (Haacke 1997) with the upper anterior temporal (an aberration in the type of *T. gracilis* Haacke 1997) and the frontoparietal with the upper second temporal (Fig. 2). The ventral counts average slightly higher than those for either *T. gracilis* or *T. rohani*, while the subcaudal counts average higher than those of *T. gracilis*, but are lower than those of *T. rohani* (Table 1).

DESCRIPTION.— Large rostral not strongly notched laterally. Dorsal head shields typical for the genus, with frontonasal slightly wider than internasal and frontal. A prefrontal wedged between frontonasal and two supraoculars; the 'third supraocular' usually present in *T. gracilis* is fused with the upper anterior temporal and contacts the frontal, while the frontoparietal of *T. gracilis* is fused with the upper second temporal; there is a single lower preocular and two postoculars (Fig. 2). There are six upper labials, the third entering the orbit, and four lower labials. Midbody scale rows 18, ventrals 137, subcaudals 72.

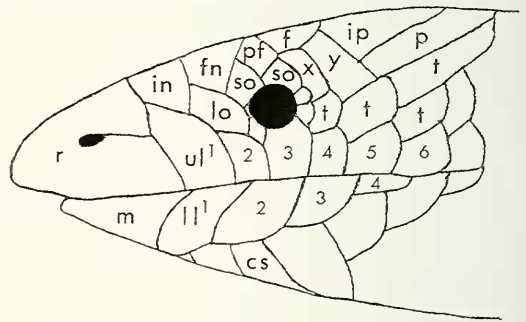


FIGURE 2. *Typhlacontias kataviensis*: lateral view of the head of the holotype (CAS 227747). KEY: cs = chin shield; f = frontal; fn = frontonasal; in = internasal; ip = interparietal; ll = lower labial; lo = loreal; m = mental; p = parietal; pf = prefrontal; r = rostral; so = supraocular; t = temporal; ul = upper labial; x = 'supraocular 3' + upper anterior temporal; y = frontoparietal + upper second temporal.

TABLE 1. The *Typhlacontias gracilis* complex. Variation in size, body proportions and scale counts. (partly after Haacke 1997)

| Species | n | Max SVL | % Tail/SVL | | | Ventrals | | | Subcaudals | | | Vertebrae |
|-----------------------|-----|---------|------------|-----------|------|----------|-------------|------|------------|-----------|------|-----------|
| | | | Range | Mean(n) | SD | Range | Mean(n) | SD | Range | Mean(n) | SD | |
| <i>T. gracilis</i> | 195 | 86 | 38–61 | 48.65(55) | 4.66 | 121–147 | 133.55(134) | 4.83 | 56–68 | 62.05(56) | 3.25 | 68 |
| <i>T. kataviensis</i> | 7 | 76 | 49–58 | 54.66(3) | 4.93 | 132–141 | 136.86(7) | 3.18 | 56–72 | 66.0(3) | 8.72 | |
| <i>T. rohani</i> | 233 | 90 | 48–73 | 57.0(69) | 5.98 | 124–146 | 134.3(193) | 4.57 | 64–84 | 69.4(73) | 11.3 | 62,63,66 |

Scale counts for the paratypes are summarised in Table 1. In CAS 227745 the frontoparietal is not fused with the upper second temporal.

COLOURATION.— Buff, a blackish blotch on the head, the paravertebral rows dark-centred, forming ragged blackish lines from nape to tip of original tail, lateral scale rows also dark-centred (Fig. 3). This pattern is remarkably similar to that of the fossorial skink *Ophiomorus brevipes* of Iran (Anderson and Levinton 1966).

SIZE.— Holotype 113 (72 + 41) mm, but CAS 227745 and 227749 both measure 76 mm in snout-vent length (tails truncated or regenerated).

DISTRIBUTION.— Only known from sand ridges bordering flood plains in the Katavi National Park in western Tanzania.

OTHER MATERIAL EXAMINED.— *Typhlacontias gracilis*: ZAMBIA: Kabompo Boma (1324C1) NMZB 501, 2822, 3405–6, 4967; Kalabo (1422D3) NMZB–UM 4811–4, 6768, 6770–9, 6781, 6783–5, 6789–90, 6792, 6794, 6796–9, 7870–99, 10049, 10051, 10055–60, 21032, 21034–42, 21044–50, 21052–7, 21059–60, 21062–8, 21070–96, 21098–21103, 21105–16, 21118–43, 21145–8, 21150; Lealui (1523A1) MNHN 20.89–95 (type series); 8 km NE of Mongu (1523A1) NMZB 15983–4; Ndau School (1522B4) NMZB 15986–8, 16023–6, 16044.



FIGURE 3. *Typhlacontias kataviensis*: paratype CAS 231982 from Jaribu Mtgao, Katavi National Park. Note the lack of stripes on the regenerated portion of the tail. Photo by T.A. Gardner.

DISCUSSION

This new population of *Typhlacontias* lies ca. 800 km northeast of the nearest known *T. gracilis* in Zambia, with other populations inhabiting the Barotse floodplain bordering the upper Zambezi. However, the missing lectotype of *Melanoseps longicauda* Tornier 1900, ZMB 16900 from 'Massai Steppe', matches a *Typhlacontias* in proportions, scale counts and especially colour pattern, and if eventually found, it could prove to represent another *Typhlacontias* population much further to the northeast, but still on the track of the transient 'arid corridor' linking the southwest arid region with the Horn of Africa.

ACKNOWLEDGMENTS

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